PSYCHO-SOCIAL DYNAMICS OF THE URBAN FOREST IN BUSINESS DISTRICTS

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ABSTRACT

Urban forests provide multiple environmental and quality of life benefits for city residents. More information is needed about public perceptions regarding the benefits and costs of trees in particular urban settings. In a recent study in the Pacific Northwest perceptions about trees in multicultural, revitalizing business districts were assessed. Interviews were conducted with small business owners and managers, as well as urban forestry professionals that serve business communities. Thematic analysis reveals extensive values and diverse attitudes regarding trees and vegetation in business communities. Annoyances were also reported, factors that are believed to impact bottom line operating costs. The interviews and subsequent standardized surveys are providing knowledge about cost-effective streetscape improvements for retail and commercial business districts. Moreover, this information is useful for comprehensive planning in business communities.

Does the urban forest benefit business districts? We might assume that the presence of trees attracts visitors to retail centers and enhances their experience during the visit. The question is of particular importance to revitalizing business districts in cities since resources for improvements are limited. Dollars for streetscape enhancements compete with other high priority needs.

While studies have documented the multiple benefits and satisfactions of urban vegetation (Dwyer et al., 1994), more information is needed about the social dynamics and benefits of trees in particular urban settings. Generally, research has revealed that urban forests provide many benefits for city residents, including improved environmental quality and more satisfying quality of life. Most research has focused on parks and residential settings (Schroeder, 1992; Sommer, 1990), overlooking the importance of the urban forest to private enterprise (Dwyer et al., 1992). Little is known about the perceived benefits and values of the urban forest in retail and commercial settings.

This study, the first of three phases of survey research, seeks to fill the void. Interviews were used to compare and contrast the perceptions and preferences of several stakeholder groups associated with revitalizing business districts. The objectives of the entire project are: 1) to compare and assess ethnic and cultural variations in response to different urban forest landscapes, 2) to evaluate the knowledge of business owners about the costs and benefits of urban forest plantings, 3) to determine the influence of the urban forest on retail district visitors' behavior, and 4) to develop a survey instrument that can be adapted for use by business associations for future urban forest perceptual assessments.

RESEARCH APPROACH

Although prior studies have identified perceived benefits and annoyances of residential street trees, we know little about the relevance of these perceptions to the business district context. Revitalizing, culturally diverse business districts are dynamic social places and vegetation can serve multiple roles within this complex context. Qualitative interviews were used to identify and interpret key issues. This study phase is exploratory, providing data in context where prior research is sparse and the relevant variables are unknown (Morgan, 1988).

Four business districts in the Seattle, WA area served as primary study sites. Representatives of three different participant groups were recruited: 1) small business owner/operators, 2) business association staff, and 3) local government urban forestry professionals. A semi-structured, open-ended interview protocol was used. Thirty-one face-to-face individual interviews were conducted at the office or business site of each participant, including a brief walk-about. This format was chosen to elicit feedback on the range, specificity, depth and personal context (Merton, 1956) of the participants' experiences in urban forest settings.

Data collection, analysis and interpretation was done simultaneously. Interview notes, observational notes and reflective notes were all transcribed then analyzed and interpreted using a constant comparison category and code assignment process. An advisory panel reviewed the data collection process and research outcomes, verifying overall response patterns and themes. A subsequent photo-questionnaire will be distributed (first regionally, then nationally) to assess the generalizability of the qualitative procedures outcomes.

URBAN FOREST BENEFITS

Benefits reports reflected the functional realities of small businesses. Businesses in revitalizing districts are often marginally profitable. Perceptions of streetscape benefits by individual businesses are weighed against the direct costs of day-to-day operations. The most positive reports came from business organization staffers (e.g. Chamber of Commerce) who work on collective goals for business districts. Their mission is to recognize and organize services, including street improvements, for collective benefit to all neighborhood businesses. Four categories of benefits were revealed.

Positive mood - "Planting and landscape draw a lot of people . . . We wouldn't have what we have without plants," explained a property manager in a successful business district. Plants and trees, if properly selected and maintained, create a positive mood for a retail district. A realtor observed that, "The benefits are huge! [Trees] just give a whole different dimension to a street, particularly with seasonal changes."

Visual identity and unity - Creating an imageable, distinctive place is a pursuit of business associations. These efforts are often combined with renewal and display of local cultural heritage, using murals and window displays. Several association staffers felt that plant choice and design can make an area memorable and appealing in the mind of a visitor, inviting return visits. A distinct plant palette can also define the boundaries of the district, encouraging visitors to shop within a specific area.

Message of care - Small businesses work hard to provide quality products and service for customers. That commitment shouldn't end at the door. A message of care can extend to the outdoor environment of business districts. The owner of a construction firm remarked, "You're always 'on' with the public. Everything you do shows the quality of your business."

Signal of change - Revitalizing business districts can use trees to send upbeat messages to prospective customers and new businesses. "Making the town look better is the fastest, easiest and least expensive thing to do to improve our image. . . Trees improve our image in a quality way, in an easy way," observed a public works professional. She added that, "If things look nice . . it sends a message to new businesses; they see it as being proactive."

Urban forest advocates often promote the environmental benefits of the urban forest. Curiously, few of those interviewed mentioned benefits such as clean air or heat island cooling. Positive place mood, visual identity and unity, a message of care and signals of change - most benefits reports convey a psychological experience of place that is developed for shoppers.

URBAN FOREST COSTS

The biggest concerns about tree planting and maintenance have to do with a business' fiscal bottom line. Even committed tree advocates felt compelled to describe annoyances associated with trees. Five reported categories of vegetation annoyances are: visibility, engineering, functional costs, debris, and security.

Visibility - A frequent complaint about trees is that they physically block the views of a business. "We like green things, but not necessarily trees," said an art gallery owner who had planted flowers to enhance business visibility. Trees are blamed for screening signs, awnings, storefronts, and window displays from both pedestrian and automobile customer traffic.

Some business owners recognized that visibility issues can be mitigated by improved sign and storefront design. Others advocate severe pruning or tree removal. Many participants recalled an instance of a tree "hate crime;" a plant that had been brutally removed to reduce its visual impact. Opening or lifting a canopy through responsible pruning was rarely discussed, suggesting an important education need.

Engineering - Exhibits of structural damage included buckled sidewalks, cracked curbs, heaved roads and even cracked building walls, as well as trees entangled in utility lines. Most problems are a consequence of "wrong tree, wrong place" choices of the past. Damage and repair response, by both business or building owners and city agencies, is stop-gap - a quick fix that temporarily mitigates a problem rather than solving it. Clearly, preventative planning and actions produce significant long-term savings.

Functional spaces - Trees are perceived to reduce usable outdoor space, particularly parking. Parking spaces are regarded as being directly related to the number of customer visits and revenue. As one designer observed, customers have " . . a sense of what is due; parking [directly] in front of a business is a right!" While many communities have successfully planted trees with minimal loss of parking spaces, business operators remain skeptical. Other functional concerns include loss of outdoor seating space and market space.

Debris - Flowers, twigs, fruit and leaves were all named as materials that dirty sidewalks, parked cars and even pedestrians. While certain plant species in certain seasons do produce prodigious amounts of organic matter, the complaints were also based on limited resources to deal with the problem. Some business respondents felt that the city had an obligation to remove these materials. Others simply felt overwhelmed. As a beauty supply business owner said, "the leaves are a nuisance. Where do we put them? In the gutter? They blow all around again. The rain makes them slippery. A small business owner just doesn't have the time to take care of these things."

Security - Respondents believe that trees harbor criminals that damage person or property. The possibility of a perpetrator climbing up and breaking into the business from the roof was reported as a reason for removing large trees. In addition, threats to personal security for business customers and staff is a most common justification for removal of small trees and shrubs.

While some business owners described potential benefits of the urban forest, most produced a list of annoyances. Several respondents described at length the particular problems of particular trees. Business association staff members also acknowledge annoyances but recognize, as well, the potential benefits of a suitably planted, well maintained urban forest. They described economies of scale of shared expenses for various streetscape improvements. For instance, one property manager described a solution for tree debris, noting that several businesses share the costs of a maintenance contract to facilitate quick and frequent clean-up. While this seems an obvious action, the autonomous character of small businesses can make such informal collaborations unusual.

DISCUSSION AND IMPLICATIONS

Benefits perceptions - Three groups were sampled for interviews; each revealed different perceptions about the costs and benefits of trees in business districts. As one realtor observed, "perception *is* reality." Our professional and experiential cognitive filters influence our interpretations of reality and cause us assume that others respond similarly (Kaplan, 1990).

For instance, urban forestry professionals described at length the potential biophysical benefits of trees in cities: pollutant filtration, storm water reduction, CO_2 conversion, improved air quality, noise and wind blockage and temperature mitigation (McPherson, 1995). Meanwhile, business owners and operators are attuned to the realities of everyday costs and how trees impact the bottom line. The annoyances of having trees in close proximity to business buildings dominated individual business reports. This was unexpected since surveys of public attitudes about street trees in residential settings have reported that annoyances were rated as being much less significant than benefits (Schroeder and Ruffolo, 1996; Sommer et al., 1990).

Meanwhile, business association staffers generally reported more benefits than annoyances of trees but focused on psychological benefits. Charles Lewis (1996) wrote that "landscaping tells stories and defines settings." Business service staff readily recognize the value of managing these messages as part of their business development and marketing efforts. Dwyer et al. (1994) report that in the course of extensive preference assessments for urban forest management they have come to recognize the "deep emotional ties between people and trees," including sensory, symbolic and human community dimensions. These subtle and intangible benefits are deemed external effects by economists; secondary effects that are not directly taken into account in the price of goods and services (Albert, 1995). Yet psychological preferences and perceptions can potentially be harnessed to create a more profitable reality.

Given the diverse perceptions in this particular urban forest context, stratified messages are needed to communicate the extensive benefits of the urban forest. Reframing issues and educational messages so they are compatible with varied interests and needs will promote greater urban forestry program participation. Traditional messages of biophysical benefits may be ineffective; rather, an exchange of information, using simple, concrete examples (Kaplan, 1990) that relate to daily business activities can be used to recruit supporters.

An example is the relationship of trees to basic business needs. Participants reported four categories of high priority services: parking, security, clean-up and marketing. Investments in plants can indirectly serve these needs; for instance, one shopping zone's marketing logo is a tree, representing their commitment to a pleasant shopping environment. Nonetheless, few business owners recognized streetscape as an expenditure that could produce secondary returns for the priority issues.

Care and customers - One finding of direct interest to revitalizing businesses is the message of care. Nassauer (1995) reports that an image of care enhances visual preference for farm and residential landscapes. This study suggests that this may also be true of business districts, with direct economic consequences. Customer service is the foundation of business success. Attention to the quantity and quality of plants within a business district implies a level of commitment to customer relations. Streetscapes are often contracted to design firms that ascribe to various aesthetic convictions. Perhaps evidence that someone is caring for the space is as important to the public as the designed arrangement of plants, a clarion call for adequate and sustained tree maintenance.

Planning: a community vision - Good planning is absolutely essential for creating a healthy and vital community forest. Businesses must come together to envision the "big picture" rather than doing piecemeal, disconnected plantings. Just as business plans are necessary, districts can do a "green plan" that

outlines an urban forestry vision, including goals, objectives and implementation actions. Planning is about process as well as product. A street improvement's manager observed that, through planning activities, "businesses have taken their downtown into their hearts." In addition, having a plan creates "an environment of opportunity," as one Chamber of Commerce staffer remarked. As financial and technical resources become available, the community is positioned to act.

Historically, streetscapes and trees have been treated like business supplies and inventory. Each business entity commits to tree planting or landscape to a different degree and expression. A more suitable metaphor may be infrastructure and utility delivery systems (Mason, 1993). Natural features can become an integral part of the community, a "green infrastructure" that achieves basic functions and is financially supported by all local property owners. Advantages of coordinated (rather than fragmented) effort is consistency, fairness of revenue contribution, uniform standards and scheduled installation and maintenance.

A city's business community has significant influence on urban forest planning and management decisions. Attention to needs and perceptions will encourage businesses to become more effective and resourceful advocates for trees. We may agree with the realtor who said, "You assume that everyone shares the values of trees as amenities." Yet other opinions must be recognized; as a beauty supply shopkeeper stated, "As a business person, my needs should be more important than trees." Knowledge about how plants can serve those needs must be generated and effectively communicated.

ACKNOWLEDGMENTS

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